

REMARKS

Claims 1-70 constitute the pending claims in the present application. Claims 1-14 are currently under consideration. Applicants cancel, without prejudice, nonelected claims 15-64. Applicants reserve the right to prosecute the nonelected claims in a continuation or divisional application. Applicants add new claim 71. Support for the subject matter of this claim is found throughout the specification. Explicit support is found, for example, on pages 29-32. No new matter has been entered. Applicants respectfully request reconsideration in view of the following remarks. Issues raised by the Examiner will be addressed below in the order they appear in the prior Office Action.

1. Applicants note that claims 15-70 have been withdrawn from consideration as directed to a nonelected invention or species.

Applicants note with appreciation the rejoinder of claims 65 and 66 with the invention of Group I. Applicants acknowledge, however, that claims 65 and 66 are directed to a nonelected species and will be considered only upon indication of allowable subject matter.

Claims 1-14 are currently under consideration.

2. Applicants apologize for any inconvenience caused by Applicants' Information Disclosure Statement filed February 12, 2002. It was Applicants understanding that the relevant references could be found in the parent application. Applicants enclose herewith a copy of the previously submitted PTO-1449, as well as copies of the requested references for the Examiner's consideration. Applicants note that references AA-AI, AY6, and AV7 have already been considered by the Examiner. Accordingly, copies of these references are not enclosed with this response.

3. Claims 7, 10, and 12 are objected to because of certain informalities. Applicants' amendments to the claims are believed to correct these informalities and obviate the objection. Applicants' amendments to claims 7, 10, and 12 are made solely to correct certain grammatical errors pointed out by the Examiner and do not narrow the scope of the claims. Reconsideration and withdrawal of these objections are requested.

4. Claims 1-14 are rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to enable one of skill in the art to practice the claimed invention. Applicants traverse this rejection and contend that the rejection is moot in light of the amended claims.

The specification provides extensive discussion and working examples supporting methods of assigning a sample to a known class, and the Office Action does not appear to dispute this fact. Rather, the rejection appears to be based on whether Applicants have enabled one of skill in the art to assign a sample to an unknown, putative class. Applicants contend that the specification is broadly enabling for assigning samples to either a known or a putative class. Nevertheless, to expedite prosecution, Applicants have amended claims 1-14 to more particularly point out that these methods are directed to assigning a sample to a known class. Applicants' amendments are believed to obviate the rejection and place these claims in condition for allowance. Applicants' amendments are not in acquiescence to the rejection with respect to methods of assigning a sample to a putative class. However, to expedite prosecution of claims directed to certain embodiments of the invention, subject matter related to methods of assigning a sample to a putative class are presented for further consideration as new claim 71.

Claim 71 is directed to methods of assigning a sample to a putative class. In the previous Office Action, the Examiner alleges that the specification does not enable one of skill in the art to practice the invention with respect to subject matter of this scope. The Examiner directs Applicants' attention to pages 50-54 of the specification and notes that, in contrast to the previously pending claims, this portion of the specification teaches class discovery based on cluster analysis. Applicants note that part (a) of new claim 71 incorporates a step of determining a previously unknown class based on cluster analysis, as suggested by the Examiner. Additional support for the subject matter of claim 71 can be found, for example, on pages 29-32.

Applicants respectfully submit that the amended claims and new claim 71 are enabled throughout their scope. Reconsideration and withdrawal of this rejection is requested.

5. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as indefinite for allegedly failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Applicants traverse this rejection and contend that the rejection is moot in light of the amended claims.

The basis of this rejection is several examples cited by the Examiner where Applicants allegedly failed to provide proper antecedent basis for language recited in the claims. Applicants apologize for these errors. However, Applicants contend that the errors pointed out in the prior Office Action were obvious errors that did not undermine the ability of the skilled artisan to understand the metes and bounds of the claimed subject matter.

Nevertheless, to expedite prosecution, Applicants have amended the claims to provide proper antecedent basis for the recited language. Specifically, Applicants' amendments to claims 1, 2, 7, 9, 10, 11, and 12 obviate the rejection. Applicants' amendments are not in acquiescence to the rejection. As outlined above, Applicants contend that any errors regarding antecedent basis were obvious errors that did not undermine the clarity of the claims. Accordingly, correction of those errors is solely procedural in nature and does not narrow the scope of the claims.

In addition to the rejections outlined above, claim 7 was rejected for the following reasons: capitalizing the names of proteins or genes; using potentially ambiguous abbreviations; and causing ambiguity with respect to whether the claim refers to proteins or genes. The Office Action alleges that these issues undermine the clarity of the claim. Applicants respectfully disagree and contend that one of skill in the art can readily appreciate the metes and bounds of the claimed subject matter in view of the level of skill in the art and the specification. Nevertheless, to expedite prosecution, Applicants have amended claim 7 to address each of the concerns raised in the Office Action.

Applicants have corrected capitalization of the gene names throughout the claim, as suggested by the Examiner. Additionally, Applicants have reviewed the claim and provided locus names instead of abbreviations wherever the use of abbreviations might cause confusion between two or more known loci. Applicants note, however, that in light of the specification, the use of abbreviations would not cause confusion as to the identity of the loci. Applicants direct the Examiner's attention to Figure 3B which provided expression data for the list of informative genes recited in claim 7. Figure 3B identifies these loci using both a common name or abbreviation and a GenBank accession number. In light of this information, one of skill in the art can readily confirm the identity of a loci referred to by a particular abbreviation. For

example, the Office Action alleges that the abbreviation “MCL1” may be confusing. However, as taught by Figure 3B, information concerning MCL1 can be found at accession number L08246, and a glance at this information unambiguously confirms that MCL1 stands for myeloid cell differentiation protein. Thus, regardless of whether Applicants make the correction suggested by the Examiner with respect to the abbreviation for MCL1, one of skill in the art can readily determine the metes and bounds of the claimed subject matter in light of the specification. Despite the clarity of the claim, as filed, Applicants have amended the claim to prevent any possible ambiguity regarding the use of abbreviations. Such amendments do not narrow the scope of the claim.

The final point raised in the Office Action with respect to claim 7 concerns some alleged confusion as to whether the list of informative genes refers to a list of genes or a list of proteins. To address this issue, Applicants have amended the claims to particularly point out that “... the informative genes correlate with genes encoding expression products that are selected from the group consisting of ...” Support for Applicants’ amendment can be found throughout the specification (*See*, for example, page 6, lines 5-14; page 21, lines 1-13; page 47, lines 5-28).

Applicants amendments to the claims are believed to obviate each of the grounds of rejection under 35 U.S.C. § 112, second paragraph. Reconsideration and withdrawal of this rejection is respectfully requested.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants submit that the pending claims are in condition for allowance. Early and favorable reconsideration is respectfully solicited. The Examiner may address any questions raised by this submission to the undersigned at 617-951-7000.


Please charge any deficiency or credit any overpayment in the fees that may be due in this matter to Deposit Account No. 18-1945, from which the undersigned is authorized to draw, under Order No. WIBL-P02-518.

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Respectfully Submitted,



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